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EXAMINER

LONSBERRY, HUNTER B

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/252,485

Applicant(s)

HENDRICKS ET AL.

Examiner

Hunter B. Lonsberry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/1/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42, 43, 46-48, 50, 51, 53, 54, 57, 60-64, 74 and 77-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42, 43, 46-48, 50, 51, 53, 54, 57, 60-64 and 74 is/are allowed.
- 6) ☒ Claim(s) 77-79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 9/1/06 have been fully considered but they are not persuasive.

Applicant argues that the Examiner used hindsight in making the rejection (page 12).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant argues that nowhere in the combined references is there any teaching or suggestion of the usage of an upgrade card inserted into an existing set top terminal (pages 11-13), and that the hardware upgrade card is not for an ornamental design, and that the Examiner incorrectly characterized the upgrade card as a mere separation of functions/parts. The insertable upgrade cards, which did exist and were not taught or suggested in the prior art references nor is there motivation within the references to

combine them in such a way. These cards prolong the useable life of the set-top terminal as well as give them flexibility of use. Moreover there is no motivation to modify the prior art to include this new mode of operation (Response pages 12-13).

Regarding applicants argument, the Examiner agrees with applicant that the hardware upgrade card is not for ornamental design. However, the Examiner notes that both claims 77 and 78 are silent regarding PIP capability being located on a hardware upgrade card. Claim 77 merely requires that at least one of the tuners and at least one of the audio decompressors are located on an upgrade card inserted into the STB. Claim 77 is silent as to whether or not the tuners are **video** tuners. Likewise, the Examiner notes that claim 78, merely requires the use of an upgrade port, and is silent regarding the use of an upgrade card. Therefore, applicant is arguing features not present in the claims.

In the previous Office Action the Examiner combined Arai (of record) in view of Willis (of record) and further in view Ryu (of record). Moreover, it would have been obvious to one of ordinary skill in the art to provide the functions on an upgrade card since the modification would have involved a mere separation of functions/parts and applicant did not provide any specific benefit, nor stated that it solve any specific problem *Nerwin V. Erlichman*, 168 USPQ 177, 179 (PTO Bd. of Int. 1969). The cited passage within Applicants' specification does state that upgrade cards prolong the useable life of the set top terminal as well as give them flexibility of use. However, the use of upgrade cards or connection of external devices in the electrical devices art is notoriously well known in order to provide increased flexibility and extending the useful life of a device. Numerous examples within the electrical device art include memory upgrades allow for more storage of data on a device than its default capabilities, SCSI

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expansion cards allow for the connection of data storage devices, modem cards allow for telecommunications exchanges, gaming ports on video game devices allow for new peripherals to be attached which establish new capabilities (paddle controllers on an Atari 2600, hardware cards which allow Atari 2600 games to be played on an Atari 5200), upgrades to the Atari arcade game Star Wars which enables a daughter board to be attached to play an Empire Strikes Back game (which prolongs the useable life of the electronic device) etc. The use of upgrade cards to which prolong the useable life of a device and provide flexibility of use predates applicant's invention.

Therefore, the combination of Arai, Wasilewski, and Ryu in combination with the hardware upgrade teachings does teach every aspect of applicant's claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 77-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai (of record) in view of Wasilewski (of record) and further in view Ryu (of record).

Considering claims 77-79, Arai discloses an apparatus for displaying a picture on a picture and corresponding method comprising:

- a) a plurality of tuners (5A, 5B) (figures 3A and 3B) for tuning;
- b) a plurality of demodulators (27, 28) or demodulating;
- c) a plurality of output ports wherein at least two of the plurality of output ports are connected to different tuners (see audio output from demod (27) to switch (10), three video outputs from demod (27) to combiner (8), audio output from demod (28) to switch (10), three video outputs from demod (28) to combiner (8)); and
- d) a microprocessor (26) connected to the plural tuners (5A, 5B) and demodulators (27,28) for coordinating signal processing.

Further switch 10 coupled to the audio outputs, the switch may outputting the audio corresponding to the primary picture or the secondary picture (column 7, lines 4-27

Note that Arai is interested in processing several different television standards for simultaneous display (col. 1, lines 5-15) and he indicated that various changes or modifications could be made to his system (col. 17, lines 10-34). However, he fails to disclose **(a)** a plurality of audio and video decompressors **(b)** that at least one video signal may have more than one of the plurality of audio signals, and **(c)** that the method uses an upgrade card inserted in an existing set-top terminal as recited in the claims.

Wasilewski discloses a system for transmitting and receiving digital television signals (figures 1-14). Digital television is another type of television standard. The digital receiver (figure 14) comprises: a demodulator (250), demultiplexer (258, 268, 272), decrypters (274), decompressors (276, 280) for decompressing video, audio and text and NTSC encoders (276,280) (columns 21-24). These are typical elements in a digital receiver for processing digital signals transmitted from a central broadcasting

facility. Further, note that Wasilewski's system may be used in various applications. See col. 2, line 41 - col. 3, line 14 and col. 34, lines 12-30. Wasilewski provides the advantage of providing digital television receiving elements to properly decode and process digital signals transmitted from a central broadcasting facility and/or to provide higher quality signals to viewers.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Arai's system to include a plurality of digital receiving circuit elements such as demultiplexors, decrypters, decompressors and NTSC encoders, as taught by Wasilewski, for the typical advantage of providing digital television receiving elements to properly decode and process digital signals transmitted from a central broadcasting facility and/or to provide higher quality signals to viewers.

The combination of Arai and Wasilewski fails to disclose one video signal having a plurality of corresponding audio signals, or utilizing an upgrade card.

Ryu discloses an apparatus for displaying a picture on a picture and corresponding method comprising a plurality of tuners (9,10), video processing circuits (4,5) for outputting video signals, and sound circuits (8, 12, 13) for outputting more than one of plurality of audio signals (native or foreign) corresponding to at least one video signal. See the entire reference including but not limited to the abstract and col. 2, lines 20-62.

Additionally, it would have been obvious to one of ordinary skill in the art to modify the combined systems of Arai and Wasilewski to include at least one video signal to have more than one of the plurality of audio signals, as taught by Ryu, for the

advantage of providing a plural picture display receiver with the ability to select a desired audio output based on a plurality of audio signals for a video signal.

Moreover, it would have been an obvious matter of design choice to utilize an upgrade card, since the modification would have involved a mere separation of functions/parts. *Nerwin V. Erlichman*, 168 USPQ 177, 179 (PTO Bd. of Int. 1969). Furthermore, it would have been obvious as a matter of design choice to make any apparatus or method steps to be insertable into any video processing receiver such as a set-top box, television or VCR, since audio and video signals are commonly received by video processing equipments that are inclusive of the set-top box , television and VCR.

Allowable Subject Matter

4. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose nor sufficient suggest the apparatus of claim 42, with the specific arrangement of tuners, demodulators, video/graphics/test demuxs as claimed by applicant.

Claims 42, 43, 46-48, 50-51, 53-54, 57, 60-64, and 74 are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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HBL


Hunter Lonsberry
Patent Examiner
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